U.S.S.N.: 10/688,756 Applicant: Prentice et al.

In the claims:

1. (canceled)

2. (new) A dispensing system for dispensing material onto a substrate, the dispensing system comprising:

a frame;

a conveyor system coupled to the frame, the conveyor system having a first track and a second track, each of which is constructed and arranged to convey substrates to working positions in the dispensing system;

a gantry system coupled to the frame; and

a dispensing head, coupled to the gantry system;

wherein the gantry system is constructed and arranged to position the dispensing head along two orthogonal axes over the working positions to dispense material onto substrates.

- 3. (new) The dispensing system of claim 2, wherein the first track and the second track are independently operable.
- 4. (new) The dispensing system of claim 3, wherein each of the first track and the second track are adjustable to accommodate substrates of different sizes.
- 5. (new) The dispensing system of claim 4, wherein the gantry system is controllable to move the dispensing head along three orthogonal axes.
- 6. (new) The dispensing system of claim 5, wherein each of the first track and the second track includes a plurality of independently operable conveyor segments.
- 7. (new) The dispensing system of claim 6, further comprising a vision inspection system coupled to the frame to inspect material deposited on substrates.

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8. (new) The dispensing system of claim 7, further comprising a second gantry system

coupled to the frame and a second dispensing head coupled to the second gantry system to

dispense material onto substrates.

9. (new) The dispensing system of claim 2, wherein each of the first track and the second

track are adjustable to accommodate substrates of different sizes.

10. (new) The dispensing system of claim 2, wherein the gantry system is controllable to

move the dispensing head along three orthogonal axes.

11. (new) The dispensing system of claim 2, wherein each of the first track and the second

track includes a plurality of independently operable conveyor segments.

12. (new) The dispensing system of claim 2, further comprising a vision inspection system

coupled to the frame to inspect material deposited on substrates.

13. (new) The dispensing system of claim 2, further comprising a second gantry system

coupled to the frame and a second dispensing head coupled to the second gantry system to

dispense material onto substrates.

14. (new) A dispensing system for dispensing material onto a substrate, the dispensing

system comprising:

a frame;

a conveyor system coupled to the frame, the conveyor system having a first track and a

second track, each of which is constructed and arranged to convey substrates to working

positions in the dispensing system;

a dispensing head;

means, coupled to the dispensing head, for moving the dispensing head along two

orthogonal axes over the working positions to dispense material onto substrates.

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15. (new) The dispensing system of claim 14, wherein the first track and the second track are

independently operable.

16. (new) The dispensing system of claim 15, wherein each of the first track and the second

track are adjustable to accommodate substrates of different sizes.

17. (new) The dispensing system of claim 16, wherein the means for moving the dispensing

head include means for moving the dispensing head along three orthogonal axes.

18. (new) The dispensing system of claim 17, wherein each of the first track and the second

track includes a plurality of independently operable conveyor segments.

19. (new) The dispensing system of claim 18, further comprising a vision inspection system

coupled to the frame to inspect material deposited on substrates.

20. (new) The dispensing system of claim 19, further comprising a second dispensing head,

and means for moving the second dispensing head along two orthogonal axes.

21. (new) The dispensing system of claim 14, wherein each of the first track and the second

track are adjustable to accommodate substrates of different sizes.

22. (new) The dispensing system of claim 14, wherein the means for moving the dispensing

head include means for moving the dispensing head along three orthogonal axes.

23. (new) The dispensing system of claim 14, wherein each of the first track and the second

track includes a plurality of independently operable conveyor segments.

24. (new) The dispensing system of claim 14, further comprising a vision inspection system

coupled to the frame to inspect material deposited on substrates.

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25. (new) The dispensing system of claim 14, further comprising a second dispensing head, and means for moving the second dispensing head along two orthogonal axes.

26. (new) A method for dispensing material onto a substrate using a dispensing system having a dispensing head and a conveyor system having a first track and a second track, each of which is constructed and arranged to convey substrates to working positions in the dispensing system, the method comprising:

loading a first substrate in the first track and moving the first substrate to a first working position;

loading a second substrate in the second track and moving the second substrate to a second working position;

dispensing material on the first substrate while moving the dispensing head along two orthogonal axes over the first substrate; and dispensing material on the second substrate.

27. (new) The method of claim 26, further comprising:

prior to dispensing, lowering the dispensing head toward the first substrate along a third axis perpendicular to the two orthogonal axes.